



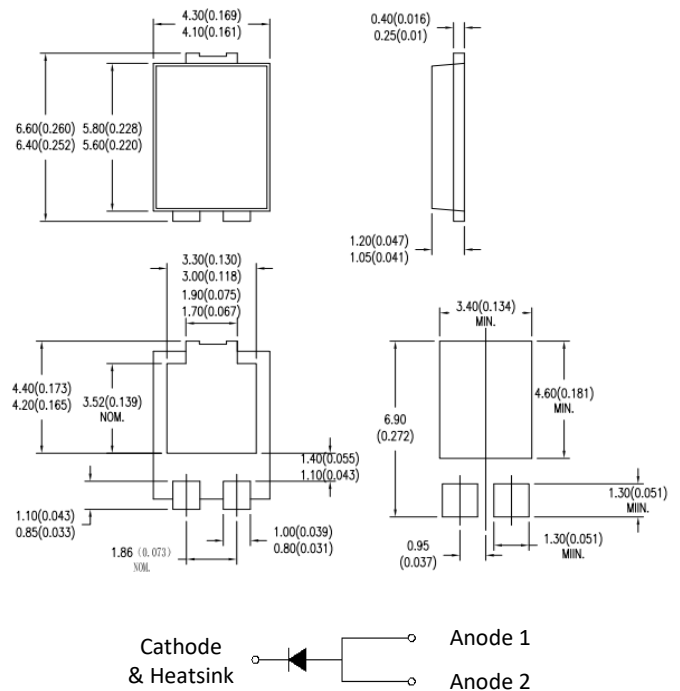
**Features**

- Schottky Barrier Chip
- High Thermal Reliability
- Patented Super Barrier Rectifier Technology
- High Forward Surge Capability
- Ultra Low Power Loss,High Efficiency
- Excellent High Temperature Stability
- plastic material-UL flammability 94V-0

**Mechanical Data**

- Case: TO-277B, molded plastic
- Terminals:Plated Leads Solderable per MIL-STD-202,Method 208
- Polarity:Cathode Band
- Mounting Position:Any
- Marking:Type Number
- Lead Free:For RoHS/Lead Free Version

**TO-277B**



dimensions in inches and (millimeters)

**Maximum Ratings and Electrical Characteristics @T<sub>A</sub> =25°C unless otherwise specified**

Single Phase,half wave,60Hz,resistive or inductive load.For capacitive load,derate current by 20%.

Parameter	SYMBOLS	SB2045	UNITS
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	45	V
Maximum RMS voltage	V <sub>RMS</sub>	31.5	V
Maximum DC blocking voltage	V <sub>DC</sub>	45	V
Maximum average forward rectified current	I <sub>(AV)</sub>	20.0	A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	250.0	A
Maximum instantaneous forward voltage at 20.0A	V <sub>F</sub>	0.55	V
Maximum DC reverse current T <sub>A</sub> =25°C at rated DC blocking voltage T <sub>A</sub> =100°C	I <sub>R</sub>	100 50	uA mA
Typical thermal resistance	R <sub>qJL</sub>	11.0	°C/W
Operating junction temperature range	T <sub>J</sub>	-55 to +150	°C
Storage temperature range	T <sub>STG</sub>	-55 to +150	°C





Characteristic Curves ( $T_A=25\text{ }^\circ\text{C}$  unless otherwise noted)

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

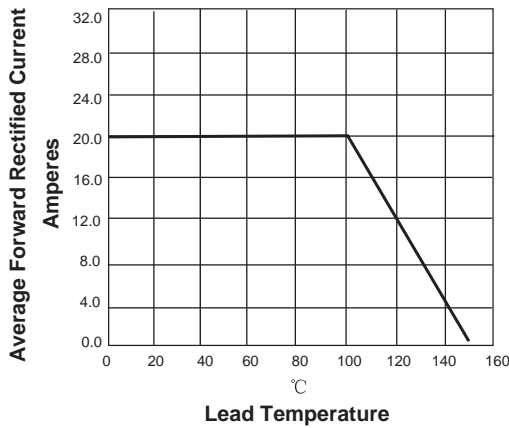


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

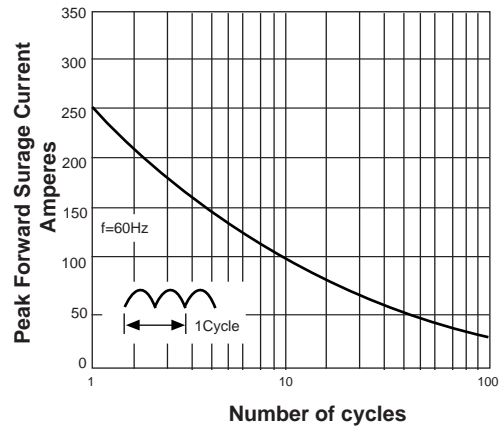


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

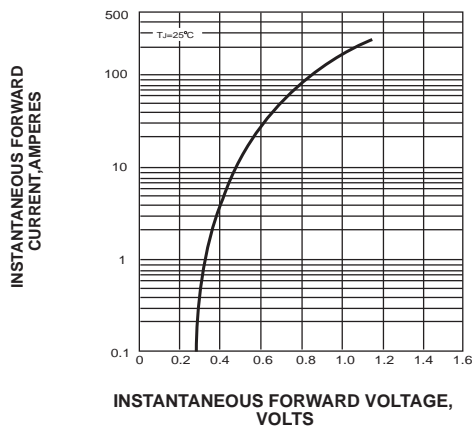


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS

